Amendment to the Claims

1. (**Currently Amended**) A sterilization method for sterilizing an object to be sterilized within a chamber, the method comprising:

a decompression step of decompressing the chamber;

a hydrogen peroxide supply step of supplying hydrogen peroxide into the chamber after decompression;

an ozone supply step of supplying ozone into the chamber after supplying the hydrogen peroxide and before the chamber reaches atmospheric pressure;

a sterilization step of sterilizing the object to be sterilized by diffusing the hydrogen peroxide and ozone supplied within the chamber;

an exhaust step of exhausting gas from within the chamber after sterilization by the hydrogen peroxide and ozone; and

a plasma generation step of generating plasma in a residual hydrogen peroxide and ozone atmosphere within the chamber after exhausting the gas so that hydroxy radicals generated by the plasma discharge allow the object to be sterilized.

2. (**Previously Presented**) The sterilization method according to Claim 1, wherein said exhaust step comprises a decomposition step in which gas being exhausted from the chamber is broken down into oxygen and water.

3. (**Previously Presented**) The sterilization method according to Claim 1, wherein said exhaust step comprises a decomposition step in which the ozone in the gas being exhausted from the chamber is broken down.

4. (**Previously Presented**) The sterilization method according to Claim 1, wherein said sterilization step comprises a step of circulating the sterilization gas in the chamber.

5. (**Currently Amended**) A sterilization apparatus comprising:

a chamber capable of housing an object to be sterilized;

a decompression unit for decompressing the inside of said chamber;

a hydrogen peroxide supply unit for supplying hydrogen peroxide into said chamber after decompression of said chamber;

an ozone supply unit for supplying ozone into said chamber after supplying the hydrogen peroxide and before the chamber reaches atmospheric pressure;

an exhaust unit for exhausting gas from within said chamber after supplying the ozone; and

a plasma generation unit for generating plasma in residual hydrogen peroxide and ozone atmosphere within said chamber after exhaust of gas so that the hydroxyl radicals generated by the plasma discharge allow the object to be sterilized.

6. (**Previously Presented**) The sterilization apparatus according to Claim 5, wherein said hydrogen peroxide supply unit comprises an antiscattering member to prevent the hydrogen peroxide supplied in liquid form to the inside of said chamber from scattering.

7. (**Previously Presented**) The sterilization apparatus according to Claim 5, wherein said exhaust unit has a gas decomposition unit for breaking down gas being exhausted from said chamber into oxygen and water.

8. (**Previously Presented**) The sterilization apparatus according to Claim 5, wherein said exhaust unit comprises an ozone decomposition catalyst for breaking down ozone in gas being exhausted from said chamber.

9. (**Previously Presented**) The sterilization apparatus according to Claim 5, further comprising a sterilization gas circulation unit for circulating sterilization gas in said chamber.

10. (**Previously Presented**) The sterilization apparatus according to Claim 5, wherein said plasma generator has a high-voltage electrode and a low-voltage electrode within said chamber, and either said high-voltage electrode or said low-voltage electrode comprises a plurality of point electrodes surrounded by an insulator.

11. (**Previously Presented**) The sterilization apparatus according to Claim 10, wherein said high-voltage electrode is connected to a high-voltage power source, while the low-voltage electrode is grounded.